NOTES ON THE FLORA OF FRANKLIN COUNTY, MASSACHUSETTS.

EMILE F. WILLIAMS.

I SPENT June 17th and 18th, 1910, in Greenfield, Massachusetts, and as I collected there and in the neighborhood several plants of much interest, I was urged by the ever diligent editors of Rhodora to put them on record.

The morning of the 17th was devoted to the bold ridge to the east of the town, known locally as Rocky Mountain. Much of this ridge is brown sandstone, and near the southerly end there is an outcrop of basaltic rock which is of such interest to geologists, that the inroads of a stone crusher near by were diverted in another direction. Immediately as we entered the woods at the foot of the slope, we were greeted by the delicate elusive purple racemes of Liparis liliifolia, an auspicious introduction to the flora of the ridge. A short scramble brought us to the summit which was literally covered by a Vaccinium that has hitherto always escaped me, until I began to think it very rare indeed, V. stamineum, the deerberry or Squaw huckleberry. Its racemes are quite loose and, unlike the flowers of most other species of the genus, the corollas are open campanulate and hang downwards on slender pedicels, like graceful little white bells with burnt orange stamens for clappers. On the edge of the cliffs, beautiful tufts of Woodsia ilvensis filled those cracks in the rock which were not appropriated by the harebells and the fruiting clumps of Columbine. A little further south the top of the cliff was covered by great patches of the by no means common Arenaria stricta. I have it from a few stations in Vermont and only one in Connecticut. Near by we came upon a thriving colony of the beautiful Asclepias quadrifolia, and Arabis Drummondi filled the cracks of a great ledge in the burning sunshine. The view from the southern end of the ridge called Sachem's Head was superb. Below us spread the town with the Green river sluggishly flowing to its junction with the Deerfield river. To our left stretched many miles of the Connecticut river and its fertile valley. Before us was extended the Deerfield valley with the picturesque village peeping out between the tall trees, and in the foreground Pine Hill, a richly wooded island in the Deerfield meadows, reminded us of

our well beloved Oak Island in the Revere marshes. The distant view displayed a noble panorama of hills and mountains as far as the eye could see.

It had rained heavily in the early morning and the bushes were very wet, so we were unable to explore the cliffs where grows the beautiful *Clematis verticillaris*. I have a specimen of this plant collected here in June, 1897, and I was informed that it is not infrequent on the steep rocky slides below the summit.

The afternoon was devoted to historical exploration in old Deerfield, and in the old Cemetery we came again upon Vaccinium stamineum, unceremoniously taking possession of the graves of early settlers, so old that they are no longer cared for and the weeds and brambles are thick amongst them. Near the cemetery is the station for the very rare Arisaema Dracontium, the green dragon. I have a specimen in my herbarium dated June 3d, 1896, which came from a garden in Deerfield where a bulb collected here some years before had been propagated and throve for many years. It has not been seen for some time, but then, nobody has looked for it. I hated to leave without investigation but as our time was limited and as the meadow was very large and very wet I reluctantly turned back. The only other station I know of in New England for this rare plant is at Weybridge, Vermont, where I collected it in 1908. It was abundant there at that time. It is said to be found locally in Connecticut.

On the 18th we started early for the valley of the Green river. The route lay at first through the Greenfield meadows and here I collected in a field an old acquaintance of New Hampshire, Camelina microcarpa. After driving some miles through the fertile fields and prosperous looking farms of the meadows, we entered the woods. We were now in Coleraine and the scenery rapidly grew wilder. The clear shallow river about one hundred feet wide, from this point northwards flows swiftly between steep hillsides covered with a luxuriant growth, deciduous trees predominating. There is room in this narrow valley only for the river and the road, which indeed in many places is held up by walls built up from the river bed. The many bars and alluvial thickets hold out a tempting invitation to be searched, and at every bend of the river beautiful views are revealed, enchanting vistas of stream and forest, moss covered ledges and fairy brooks plunging down the hillsides under dimly lit arches of verdure. It is New England's hill country at its best and reminded us of river scenery we had

explored, in wild and remote regions, where the hand of man has not yet despoiled nature of her glory.

Our principal objective in penetrating this lovely wilderness was to visit a station for Waldsteinia fragarioides recently discovered by my cousin, Mrs. George W. Thacher, a botanist of large experience, who accompanied me. An agreeable surprise was held back by her, and when we alighted at her direction, we found ourselves before a large and thriving colony of Equisetum scirpoides, the first one I had seen in Massachusetts. This Equisetum is fairly frequent in northern Maine and northwards and is occasionally found in Vermont, the Berkshires and western Connecticut. It is however not common, and I was very much pleased to renew my acquaintance with it. The Waldsteinia was close by and was growing rather sparingly on a rich bank, in partial shade. It was past flowering, but I knew it at once. I learn that the Grey Herbarium contains but one sheet of the Waldsteinia from New England, collected at Hanover, New Hampshire, in 1846. The herbarium of the New England Botanical Club has two,one from Hanover collected by Dr. George G. Kennedy, and one from Pownal, Vermont collected by Fred G. Floyd. Mr. Walter Deane who kindly furnished me with the above data has a specimen from Connecticut in his herbarium. I have myself collected Waldsteinia only once before, at Brandon, Vermont, in company with Dr. Kennedy in May, 1908. I have it also in my herbarium from Lebanon, New Hampshire (G. G. Kennedy) Middlebury, Vermont (Dr. Ezra Brainerd) and Rutland, Vermont (W. W. Eggleston). While this plant may be fairly common in Vermont especially in the Champlain valley, it appears to have been seldom reported from other New England localities Along the road grew in rich abundance such plants as Mitella diphylla, Tiarella cordifolia, Cystopteris bulbifera, Onoclea Struthiopteris, Carex sparganioides, Luzula saltuensis, all dear to the heart of the botanist, and a hurried inspection of a short stretch of river beach rewarded us with Spiranthes lucida, Habenaria hyperborea, and most unexpected in this wild spot, Lithospermum officinale. The valley of the Green river is easily reached from Greenfield and I have no doubt from the short visit I made to it, that it would well repay a systematic investigation of its flora.

CAMBRIDGE, MASSACHUSETTS.